# Curriculum Vitae

**Yanjuan Guo**
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## Education

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| 2010 | Ph.D. in atmospheric sciences | Stony Brook University |
| 2002 | M.S. in atmospheric sciences | Nanjing University, China |
| 1999 | B.S. in atmospheric sciences | Nanjing University, China |

## Professional experience

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| 2010.12-present | Postdoctoral fellow at Jet Propulsion Lab through JIFRESSE/UCLA |
| 2010.9-2010.11 | Postdoctoral fellow at Stony Brook University |
| 2004-2010 | Research assistant at Stony Brook University |
| 2003-2004 | Teaching assistant at Stony Brook University |
| 2002-2003 | Weather forecaster at Shanghai Weather Forecast Center, China |
| 1999-2002 | Research assistant at Nanjing University, China |

## Research experience

### Research interests:

Climate dynamics and diagnostics - dynamics and variability of extratropical cyclones and storm tracks;

Aerosol variability associated with the Madden - Julian Oscillation;

### Research strengths:

A lot of experience in analyzing large datasets including the reanalysis, model outputs and various observations. Datasets used include:
-- NCEP/NCAR reanalysis and ECMWF reanalysis (ERA-15, ERA-40, and ERA-Interim)
-- IPCC CMIP (Coupled Model Intercomparison Project) AR4 runs
-- Satellite observations from MODIS (Moderate Resolution Imaging Spectroradiometer), MISR (Multi-angle Imaging SpectroRadiometer), CloudSat, and etc.
-- COSMIC (Constellation Observing System for Meteorology, Ionosphere & Climate) GPS satellite radio occultation observations
-- Radiosonde observations
-- COADS (Comprehensive Ocean-Atmosphere Data Set) ship observations

Experienced in running and modifying stationary wave models

Experience in running NCAR/CAM-3.0 (the Community Atmosphere Model)
Proficient in Fortran, IDL, Unix/Linux shell script coding, and GrADS analysis package

## Peer-reviewed publications

Guo, Y.*, and coauthors: MJO-related Atlantic dust and smoke variability from MODIS and MISR satellite measurements. (In submission to *J. Geophys. Res.*)

Guo, Y.*, and E.K.M. Chang: Have the Southern Hemisphere storm tracks been strengthening after 1979? (In submission to *Climate Dynamics*)

Chang, E.K.M., Y. Guo*, Xiaoming Xia, and Minghua Zheng, 2011: Storm Track Activity in IPCC AR4/CMIP3 Model Simulations, *J. Climate*, submitted.

Chang, E.K.M., and Y. Guo*, 2011: Is Pacific storm track activity correlated with the strength of the upstream wave source?, *J. Climate*, in revision.

Chang, E.K.M., and Y. Guo*, 2011: Comments on ‘‘The Source of the Midwinter Suppression in Storminess over the North Pacific’’, *J. Climate*, 24, 5187–5191.

Guo, Y.*, E.K.M. Chang, and S.S. Leroy, 2009: How strong are the Southern Hemisphere storm tracks? *Geophys. Res. Lett.*, 36, L22806, doi: 10.1029/2009GL040733.

Guo, Y.*, and E.K.M. Chang, 2008: Impacts of assimilation of satellite and rawinsonde observations on Southern Hemisphere baroclinic wave activity in the NCEP/NCAR reanalysis. *J. Climate*, 21, 3290-3309.

Chang, E.K.M., and Y. Guo*, 2008: Reply to comment by Lennart Bengtsson and Kevin I. Hodges on “Is the number of North Atlantic tropical cyclones significantly underestimated prior to the availability of Satellite observations?”. *Geophys. Res. Lett.*, 35, L09811, doi: 10.1029/2007GL032936.

Chang, E.K.M., and Y. Guo*, 2007: Is the number of North Atlantic tropical cyclones significantly underestimated prior to the availability of satellite observations? *Geophys. Res. Lett.*, 34, L14801, doi: 10.1029/2007GL030169.

Chang, E.K.M., and Y. Guo*, 2007: Dynamics of the stationary anomalies associated with the interannual variability of the mid-winter Pacific storm track – the roles of tropical heating and remote eddy forcing. *J. Atmos. Sci.*, 64, 2442-2461.

Yang X.Q., Q. Xie, Y.M. Zhu, X.G. Sun, and Y. Guo*, 2005: Decadal-to-interdecadal variability of precipitation in North China and associated atmospheric and oceanic anomaly patterns. *Chinese Journal of Geophysics*, 48(4), 61-69.

Yang X.Q., Y. Guo*, and G.Y. Xu, 2002: Comparison of global spatio-temporal structures between interannual and interdecadal climate variations. *Journal-Nanjing University Natural Sciences Edition*, 38(3), 308-317. (In Chinese)

Guo Y.*, and X.Q. Yang, 2002: Characteristics of the interannual and interdecadal variabilities in the global ocean-atmosphere system. *Scientia Meteorologica Sinica*, 22(2), 127-138. (In Chinese)

## Selected conference presentations

Guo, Y.*, and E.K.M. Chang, Analyzing storm track variations using feature tracking. 18th Conference on Atmospheric and Oceanic Fluid Dynamics, 2011, Spokane, WA, USA (poster)

Guo, Y.*, and E.K.M. Chang, Have the Southern Hemisphere storm tracks been strengthening after 1979? 22nd Conference on Climate Variability and Change, 2010, Atlanta, GA, USA (poster)

Guo, Y.*, X. Xia, and E.K.M. Chang, How strong are the Southern Hemisphere storm tracks? 15th Conference on Middle Atmosphere, 2009, Stowe, VT, USA (talk)

Guo, Y.*, and E.K.M. Chang, Assessing the trends of Southern Hemisphere transient wave activity in reanalyses and rawinsonde observations, 19th Conference on Climate Variability and Change, 2007, San Antonio, TX, USA (poster)

Guo, Y.*, and E.K.M. Chang, Dynamics of the interannual variability of the winter Pacific storm track, 17th Conference on Climate Variability and Change, 2005, Cambridge, MA, USA (talk)